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2 1.

3 The combination of a mechanism for releasing its cocked condition in a raised
4 position on a frame of an apparatus and a standard on which said frame is
5 mounted for raising and lowering it, comprising
6 a bell-crank assembly having a pivotal mount pivotally mounted on said frame and
7 having a first arm and a second arm on opposite sides of the pivotal
8 mount,
9 bearing means mounted on said first arm,
10 means for pivoting the second arm on the other side of the pivotal mount,
11 said standard including a latch means,
12 said bearing means engaging said latch means in the cocked condition,
13 whereby
14 upon actuation of said pivoting means, said bell-crank assembly turns on its
15 pivotal mount to disengage said bearing means from said latch means and
16 thereby lower the frame on said standard.

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19 2.

20 The combination of said mechanism and standard of claim 1 wherein
21 said pivoting means comprises
22 solenoid means having a reciprocable rod and being fixedly connected to said
23 frame which when energized retracts said rod thereby turning said second
24 arm about the pivotal mount.

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27 3.

28 The combination of the mechanism and standard of claim 2 wherein
29 said solenoid means includes linkage connecting its rod to said second arm.

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4.

The combination of said mechanism and standard of claim 3 wherein
said standard comprises
a threaded stem,
said latch means is threadedly mounted on said stem, and
handle means securely mounted to said latch means for adjusting said latch means
along the length of said stem,
whereby the position of the cocked condition of said mechanism to said frame is
adjustable along the length of said stem.

5.

The combination of said mechanism and standard of claim 4 wherein
said latch means comprises
a threaded sleeve and a ledge at its bottom on which said bearing means seats in
a cocked condition for said mechanism.

6.

The combination of said mechanism and standard of claim 5 wherein
said bearing mean comprises
a roller.

7.

In an apparatus for testing the co-efficient-of-friction of a surface such as the surface of a road, the apparatus including

a frame including longitudinally-extending members and being suitably mounted on a plurality of standards adapted to engage such surface,

a plurality of standards supporting said frame,

a carriage slidably mounted on said members,

constant-force coiled spring means operatively connecting together said frame and carriage for retracting said carriage along said members upon completion of the testing operation by said apparatus,

a tire securely mounted to a wheel rotatably mounted on said carriage, means on said frame for maintaining a span between the tire and such surface,

means for rotating the wheel by which the tire rotates,

a gauging tape in alignment with one of said members, and

indicator means mounted on one of said members slidable with said carriage in a forward direction of motion for said carriage,

the improvement comprising

said rotating means including a motor having a shaft on which a first sprocket wheel having teeth is securely mounted thereto and which accelerates the speed of said tire upon its actuation,

electronic means for actuating said rotating means whereby said carriage slides in a direction of forward motion along said members,

said electronic means including

means for sensing the speed of said rotating means as the speed of said tire increases to reach the predetermined value in said electronic means, and

means for releasing said maintaining means,

whereby

the tire drops to engage such surface and at which dropping said indicator means halts on said one of said members at a gauge reading to indicate the co-efficient of friction of the surface to which the tire drops.

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2 8.

3 The apparatus of claim 7 wherein

4 a single one of said standards supports said frame at its rear, and

5 said maintaining means comprises

6 a bell-crank assembly having a pivotal mount pivotally mounted on and at the rear

7 of said frame and having a first arm and a second arm on opposite sides of

8 the pivotal mount,

9 bearing means mounted on said first arm,

10 means for pivoting the second arm on the other side of the pivotal mount,

11 said single one of said standards including a latch means,

12 said bearing means engaging said latch means in the cocked condition,

13 whereby

14 upon actuation of said pivoting means, said bell-crank assembly turns on its

15 pivotal mount to disengage said bearing means from said latch means and

16 thereby lower the frame on said one of said standards.

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19 9.

20 In the apparatus of claim 8 wherein

21 said pivoting means comprises

22 solenoid means having a reciprocable rod and being fixedly connected to said

23 frame which when energized retracts said rod thereby turning said second

24 arm about the pivotal mount.

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27 10.

28 In the apparatus of claim 9 wherein

29 said solenoid means includes linkage connecting its rod to said second arm.

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11.

In the apparatus of claim 10 wherein

a single one of said plurality of standards is disposed at the rear of said frame and
comprises

a threaded stem,

said latch means is threadedly mounted on said stem, and

handle means securely mounted to said latch means for adjusting said latch means
along the length of said stem,

whereby the position of the cocked condition of said mechanism to said frame is
adjustable along the length of said stem.

12.

In the apparatus of claim 11 wherein

said latch means comprises

a threaded sleeve and a ledge at its bottom on which said bearing means seats in
a cocked condition for said mechanism.

13.

In the apparatus of claim 12 wherein

said bearing mean comprises

a roller.

14.

In the apparatus of claim 7 wherein

the wheel includes an axle,

said rotating means further comprising

a second sprocket wheel secured to said axle, and

a toothed pulley drive belt operatively connecting the first sprocket wheel and
second sprocket wheel together.